

1 / 7

GTCAATATGCTGTTCAAGTCATGGCAACTGGCAGCAGCCTCCGGCTCCTGTCTGGAGTC MetLeuPheLysSerTrpGlnLeuAlaAlaAlaSerGlyLeuLeuSerGlyVa	60 18
CTCGGCATCCGATGGACACCGGCAGCCACCCATTGAGGCTGTTGATCCCAGTGAAG 1LeuGlyIleProMetAspThrGlySerHisProIleGluAlaValAspProGluValLy	120 38
ACTGAGGTCTCGCTGACTCCCTCCTGCTGCAGCAGGCAGTGA sThrGluValPheAlaAspSerLeuLeuAlaAlaGlyAspAspAspTrpGluSerPr	180 58
CCATACAACTTGCTTACAGGAATGCCCTGCCATTCCACCTGTCAAGCAGCCCAAGATG oProTyrAsnLeuLeuTyrArgAsnAlaLeuProIleProProValLysGlnProLysMe	240 78
ATCATTACCAACCCGTCAACGGCAAGGACATTGGTACTATGAGATCGAGATCAAGCCA tIleIleThrAsnProValThrGlyLysAspIleTrpTyrGluIleGluIleLysPr	300 98
TTTCAGCAAAGGATTACCCACCTTGCAGCCCTGCCACTCTCGTGGCTACGATGGCATG oPheGlnGlnArgIleTyrProThrLeuArgProAlaThrLeuValGlyTyrAspGlyMe	360 118
AGCCCTGGTCTACTTCAATGTTCCCAGAGGAACAGAGACTGTAGTTAGGTTCATCAAC tSerProGlyProThrPheAsnValProArgGlyThrGluThrValValArgPheIleAs	420 138
AATGCCACCGTGGAGAACTCGGTCCATCTGCACGGCTCCCCATCGCGTGCCCCCTTCGAT nAsnAlaThrValGluAsnSerValHisLeuHisGlySerProSerArgAlaProPheAs	480 158
GGTTGGGCTGAAGATGTGACCTTCCCTGGCGAGTACAAGGATTACTACTTCCAACTAC pGlyTrpAlaGluAspValThrPheProGlyGluTyrLysAspTyrTyrPheProAsnTy	540 178
CAATCCGCCGCCTCTGTGGTACCATGACCACGCTTCATGAAGACTGCTGAGAATGCC rGlnSerAlaArgLeuLeuTrpTyrHisAspHisAlaPheMetLysThrAlaGluAsnAl	600 198
TACTTGGTCAGGCTGGCGCCTACATTATCACCGACGAGGCTGAGGATGCTCTCGGTCTT aTyrPheGlyGlnAlaGlyAlaTyrIleIleAsnAspGluAlaGluAspAlaLeuGlyLe	660 218
CCTAGTGGCTATGGCGAGTTCGATATCCCTCTGATCCTGACGGCCAAGTACTATAACGCC uProSerGlyTyrGlyGluPheAspIleProLeuIleLeuThrAlaLysTyrTyrAsnAl	720 238
GATGGTACCTCGCGTTGACCGAGGGTGAGGACCAGGACCTGTGGGAGATGTCATCCAT aAspGlyThrLeuArgSerThrGluGlyGluAspGlnAspLeuTrpGlyAspValIleHi	780 258
GTCAACGGACAGCCATGGCCTTCCTAACGTCCAGCCCCGCAAGTACCGTTCCGATTC sValAsnGlyGlnProTrpProPheLeuAsnValGlnProArgLysTyrArgPheArgPh	840 278
CTCAAACGCTGCCGTGTCGCTGGCTCCTCTACCTCGTCAGGACCAGCTCTCCAAAC eLeuAsnAlaAlaValSerArgAlaTrpLeuLeuTyrLeuValArgThrSerSerProAs	900 298
GTCAGAATTCTTCCAAGTCATTGCCTCTGATGCTGGCTCCTTCAAGCCCCGTTCA nValArgIleProPheGlnValIleAlaSerAspAlaGlyLeuLeuGlnAlaProValG1	960 318
ACCTCTAACCTCTACCTGCTGTTGCCAGCGTTACGAGATCATTATTGACTTCACCAAC nThrSerAsnLeuTyrLeuAlaValAlaGluArgTyrGluIleIleAspPheThrAs	1020 338
TTTGCTGGCCAGACTCTGACCTGCGAACGTTGCTGAGACCAACGATGTCGGCGACGAG nPheAlaGlyGlnThrLeuAspLeuArgAsnValAlaGluThrAsnAspValGlyAspG1	1080 358
GATGAGTACGCTCGCACTCTGAGGTGATGCGCTCGTCAGCTCTGGCACTGTTGAG uAspGluTyrAlaArgThrLeuGluValMetArgPheValValSerSerGlyThrValG1	1140 378

FIG._ 1A

GACAAACAGCCAGGTCCCCTCCACTCTCCGTGACGTTCCCTCCCTCACAAAGGAAGGC uAspAsnSerGlnValProSerThrLeuArgAspValProPheProProHisLysGluG1	1200 398
CCCGCCGACAAGCACCTCAAGTTGAACGCAGCAACGGACACTACCTGATCAACGATGTT yProAlaAspLysHisPheLysPheGluArgSerAsnGlyHisTyrLeuIleAsnAspVa	1260 418
GGCTTGCCTGATGTCAATGAGCGTGTCTGGCCAAGCCCGAGCTCGGCACCGTTGAGGTC 1GlyPheAlaAspValAsnGluArgValLeuAlaLysProGluLeuGlyThrValGluVa	1320 438
TGGGAGCTCGAGAACCTCCTCTGGAGGCTGGAGGCCACCCCGTCCACATTCACCTGTTGAC 1TrpGluLeuGluAsnSerSerGlyGlyTrpSerHisProValHisIleHisLeuValAs	1380 458
TTCAAGATCCTCAAGCGAACTGGTGGTCGTGGCCAGGTCATGCCCTACGAGTCTGCTGGT pPheLysIleLeuLysArgThrGlyGlyArgGlyGlnValMetProTyrGluSerAlaG1	1440 478
CTTAAGGATGTCGTCGGTTGGGCAGGGGTGAGACCCTGACCATCGAGGCCACTACCAA yLeuLysAspValValTrpLeuGlyArgGlyGluThrLeuThrIleGluAlaHisTyrG1	1500 498
CCCTGGACTGGAGCTTACATGTGGCACTGTCACAACCTCATTACGAGGATAACGACATG nProTrpThrGlyAlaTyrMetTrpHisCysHisAsnLeuIleHisGluAspAsnAspMe	1560 518
ATGGCTGTATTCAACGTCACCGCCATGGAGGAGAAGGGATATCTTCAGGAGGACTTCGAG tMetAlaValPheAsnValThrAlaMetGluGluLysGlyTyrLeuGlnGluAspPheG1	1620 538
GACCCCATGAACCCCAAGTGGCGCGCCGTTCCCTACAACCGCAACGACTCCATGCTCGC uAspProMetAsnProLysTrpArgAlaValProTyrAsnArgAsnAspPheHisAlaAr	1680 558
GCTGGAAACTTCTCCGCCGAGTCCATCACTGCCGAGTGCAGGAGCTGGCCGAGCAGGAG gAlaGlyAsnPheSerAlaGluSerIleThrAlaArgValGlnGluLeuAlaGluGlnG1	1740 578
CCGTACAACCGCCTCGATGAGATCCTGGAGGATCTTGGAAATCGAGGAGTAA uProTyrAsnArgLeuAspGluIleLeuGluAspLeuGlyIleGluGlu	1791 594

FIG._1B

CTGGCTAGCC	TCACCTGGTA	GACAGCCCTG	ACAGCCTCAC	TGGCTGGGG	TCGAAAGGCC	60
AGTCAATATC	TTGGTCACTG	CTAATAGTT	CTTGCTACGC	GCAAAAAGCT	CCTTGCCGAA	120
GGGGCACAGA	CTATCAAGTG	AGACATATAG	GATGCATGTC	TTTCATAGCC	ACAGTTAGGG	180
TGGTACCTA	CTCGAAGAGG	CCCCGACTTG	CATGCATACG	ACATGTCGCT	TCCATGCAAC	240
ATGTATGCGC	ACATCGGCAG	TCAGGCACCC	TCTGCATGCA	GAATAGAAC	CCCCTGGTTT	300
CCTTTGTTT	CTTTCCCTT	CTCAACGACG	CGTGAGCGTG	TTAACATTGA	GCAAGGCCGA	360
GTGGTCTGTT	CACGAGGTTA	CCATCGAACT	CTCTTCTTC	CCAATCATGA	CCTGCCCCCC	420
GAGTTTAGCC	CCCACATCACGG	CTGTGAAATC	CACTTCGATA	ATCCTAGCCT	AGTGCTACTC	480
TTCAATAGTT	GCTCCTGATG	GGGCACTTG	GTCACATTG	CTTGGTTYCT	CCTACCTCGT	540
TCTCTTCGCG	ATCAAGCCTC	TATGCCGAC	GACAACACCT	CATTGGCCCG	GACCACTTTG	600
AGCGCGCAGC	CACCTCGCG	CCGAAGGGAGT	TGATAACACC	CTTCACCCCT	GCCCCAATGAT	660
GGAGTTTG	TCTATTGTC	ATGATCACCT	CACATTCACT	AGATCACGGA	TCCTGGAAGA	720
GGGTGTGGAA	GCCAGACAG	CTTGTCCCTG	TTCTTGCGAGA	CTCAGGTCAG	CTCCTAGCGG	780
CTATCACAGC	TCAGGATTAT	CAAGTCCCGT	AAAGTCCAGA	CCCTTTCAT	TGTATGATGC	840
TGCCTAATT	GCGCTATCTC	TATGCCGTAG	CAGCCGTCTT	GGCTACAACT	GGCTGCCATG	900
GCTGAAGCAT	CGTGAGATCT	ATAAAGGTCT	CCGAATCCTC	GGTGAAGTCA	GAATCGCTC	960
TCCACACCAAG	TCAACAAACAA	GCTTCTTCT	CTTACAGCTT	AGCCTGAGCA	CATTACAGA	1020
ACTCTTCCT	TCTTTCGTC	AATATGCTGT	TCAAGTCATG	GCAACTGGCA	GCAGCCTCCG	1080
GGCTCCTGTC	TGGAGTCCTC	GGCATCCCGA	TGGACACCGG	CAGCCACCCC	ATTGAGGCTG	1140
TTGATCCCAGA	AGTGAAGACT	GAGGTCTCG	CTGACTCCCT	CCTTGCTGCA	GCAGGCGATG	1200
ACGACTGGGA	GTCACCTCCA	TACAACCTGC	TTTACAGGTG	AGACACCTGT	CCCACCTGTT	1260
TTCCCTCGAT	AACTAACTCT	TATAGGAATG	CCCTGCCAAT	TCCACCTGTC	AAGCAGCCCA	1320
AGATGTATGT	CTTTGATTTT	CTACGAAGCA	ACTCGGCC	GACTAATGTA	TTCTAGGATC	1380
ATTACCAACC	CTGTCAACCGG	CAAGGACATT	TGGTACTATG	AGATCGAGAT	CAAGCCATT	1440
CAGCAAAGGG	TGAGTTTGCT	CAGAAACCTT	GTGGTAATT	ATCATGTTA	CTGACCCCTT	1500
CAGATTACCC	CCACCTTGCG	CCCTGCCACT	CTCGTCGGCT	ACGATGGCAT	GAGCCCTGGT	1560
CCTACTTCA	ATGTTCCCAG	AGGAACAGAG	ACTGTAGTTA	GGTCATCAA	CAATGCCACC	1620
GTGGAGAAC	CGGTCCATCT	GCACGGCTCC	CCATCGCGT	CCCTTTCGA	TGGTTGGGCT	1680
GAAGATGTGA	CCTTCCTGG	CGAGTACAAG	GATTACTACT	TTTCCAACTA	CCAATCCGCC	1740
CGCCTTCTGT	GGTACCATGA	CCACGCTTC	ATGAAGGTAT	GCTACGAGC	TTTATCTTC	1800
TTGGCTACCT	TTGGCTAAC	AACTCCCTT	CGTAGACTGC	TGAGAATGCC	TACTTTGGTC	1860
AGGCTGGCGC	CTACATTATC	AACGACGAGG	CTGAGGATGC	TCTCGGTCTT	CCTAGTGGCT	1920
ATGGCGAGTT	CGATATCCCT	CTGATCTGA	CGGCCAAGTA	CTATAACGCC	GATGGTACCC	1980
TGCGTTCGAC	CGAGGGTGAG	GACCAGGACC	TGTGGGGAGA	TGTCATCCAT	GTCAACGGAC	2040
AGCCATGGCC	TTTCCCTAAC	GTCCAGCCCC	GCAAGTACCG	TTTCCGATT	CTCAACGCTG	2100
CCGTGTCTCG	TGCTTGGCTC	CTCTACCTCG	TCAGGACCAG	CTCTCCAAAC	GTCAGAATT	2160
CTTCACCAAGT	CATTGCCCT	GATGCTGGTC	TCCTTCAAGC	CCCCGTTCA	ACCTCTAAC	2220
TCTACCTTGC	TGTTGCCGAG	CGTTACGAGA	TCATTATTGG	TATGCCCTCC	CCTCTCACGA	2280
ATGAGTCAAG	AACTCTAAC	CTAACACTTG	TAGACTTCAC	CAACTTGCT	GGCCAGACTC	2340
TTGACCTGCG	CAACGTTGCT	GAGACCAACG	ATGTCGGCGA	CGAGGATGAG	TACGCTCGCA	2400
CTCTCGAGGT	GATGCGCTTC	GTCGTCACT	CTGGCACTGT	TGAGGACAAC	AGCCAGGTCC	2460
CCTCCACTCT	CCGTGACGTT	CCTTCCCTC	CTCACAAAGGA	AGGCCCGGCC	GACAAGCACT	2520
TCAAGTTGAA	ACGCAAC	GGACACTACC	TGATCAACGA	TGTTGGCTT	GCCGATGTCA	2580
ATGAGCGTGT	CCTGGCAAG	CCCGAGCTCG	GCACCGTTGA	GGTCTGGGAG	CTCGAGAACT	2640
CCTCTGGAGG	CTGGAGCCAC	CCCGTCCACA	TTCACCTTG	TGACTTCAAG	ATCCTCAAGC	2700
GAACCTGGTGG	TCGTGGCCAG	GTCACTGCC	ACGAGTCTGC	TGGTCTTAAG	GATGTCGCT	2760
GGTTGGGAGC	GGGTGAGACC	CTGACCATCG	AGGCCCCACTA	CCAACCCCTGG	ACTGGAGCTT	2820
ACATGTGGCA	CTGTACAAAC	CTCATTCACTG	AGGATAAACGA	CATGATGGCT	GTATTCAACG	2880
TCACCGCCAT	GGAGGAGAAC	GGATATCTC	AGGAGGACTT	CGAGGACCCC	ATGAACCCCA	2940
AGTGGCGCGC	CGTTCTTAC	AACCGCAACG	ACTTCCATGC	TCGCGCTGGA	AACTTCTCCG	3000
CCGAGTCCAT	CACTGCCGA	GTGCAGGAGC	TGGCCGAGCA	GGAGCCGTAC	AACCGCCTCG	3060
ATGAGATCCT	GGAGGATCTT	GGAATCGAGG	AGTAAACCCC	GAGCCACAAG	CTCTACAATC	3120
GTTTGAGTC	TTAACGACGAG	GCTCTTGGTG	CGTATTCTT	TCTTCCCTAC	GGGGAACCTCC	3180
GCTGTCCACT	GCGATGTGAA	GGACCATCAC	AAAGCAACGT	ATATATTGGA	CTCACCACTG	3240
TCATTACCGC	CCACTGTAC	CTATTGATT	CTTGTTCAAA	CTTTTCTAGT	GCGAGAGTGT	3300
CCATAGTCAA	GAAACGCCA	TAGGGCTATC	GTCTAAACTG	AACTATTGTG	TGGTCTGTGA	3360
CGTGGAGTAG	ATGTCAATTG	TGATGAGACA	CAGTAAATAC	GGTATATCTT	TTCCTAGGAC	3420
TACAGGATCA	GTTCATG	AGATTACATC	CGTCTAATGT	TTGTCCATGA	GAGTCTAGCT	3480
AAGGTTGAGA	ATGCATCAGA	CGGAATCATT	TGATGCTCTC	AGCTCGTATT	ACCGATGTAA	3540
GACAAGTTAG	GTAAGTGCT	TGGTATCCGA	AAATGACTCA	GGCTCCCTCA	TTAGGTTGCA	3600
TGTGAAACC	TTCAGCAACT	CATGGGTGTT	GGGACCAAAT	CATCCATACC	TGATTTTGAT	3660
AACTGACCTG	GGTCAAT					3677

FIG._2

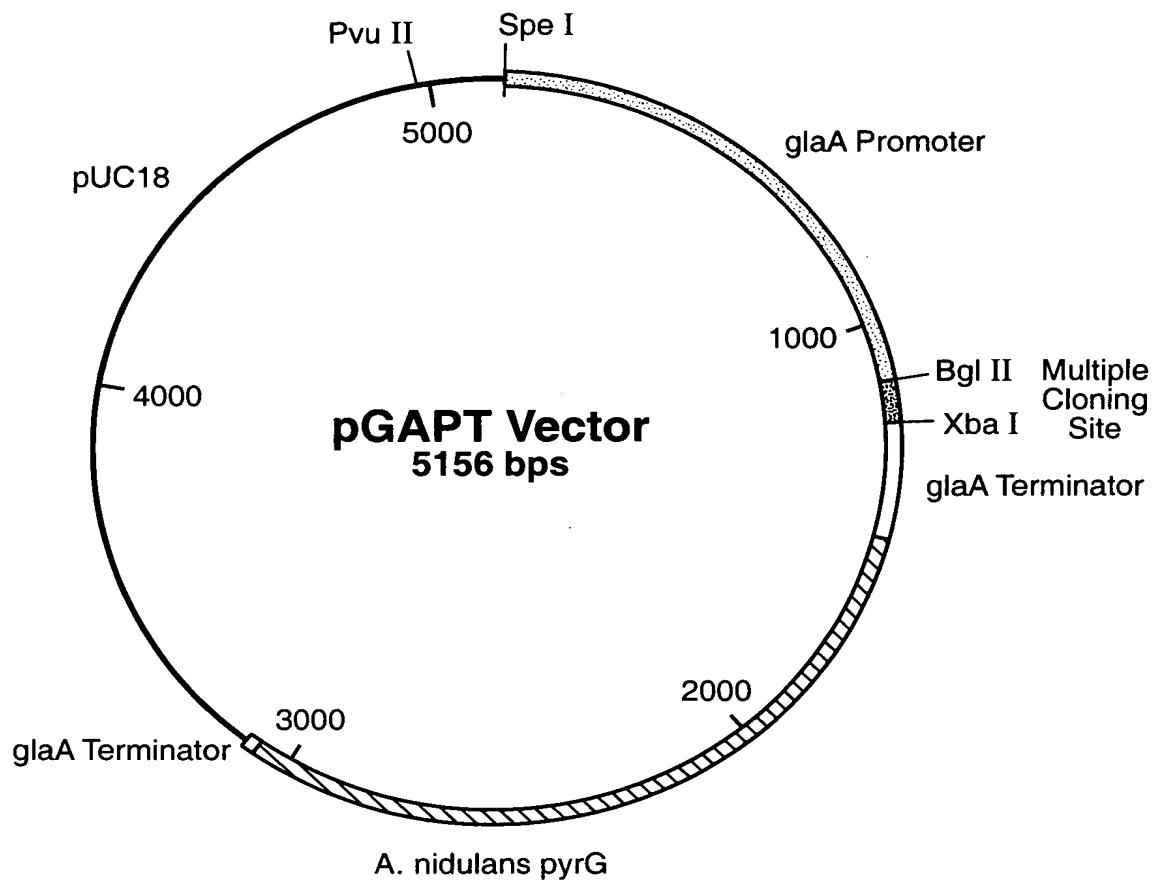


FIG._4

AGATCTAATA	TGCTGTTCAA	GTCATGGCAA	CTGGCAGCAG	CCTCCGGCT	CCTGTCTGGA	60
GTCCCTGGCA	TCCCGATGGA	CACCGGCAGC	CACCCCATTG	AGGCTGTTGA	TCCCGAAGTG	120
AAGACTGAGG	TCTTCGCTGA	CTCCCTCCTT	GCTGCAGCAG	GCGATGACGA	CTGGGAGTCA	180
CCTCCATACA	ACTTGCTTTA	CAGGTGAGAC	ACCTGTCCCA	CCTGTTTCC	CTCGATAACT	240
AACTCTTATA	GGAATGCCCT	GCCAATTCCA	CCTGTCAAGC	AGCCCAAGAT	GTATGTCTT	300
GATTTCTAC	GAAGCAACTC	GGCCCCGACT	AATGTATTCT	AGGATCATT	CCAACCCGT	360
CACCGGCAAG	GACATTTGGT	ACTATGAGAT	CGAGATCAAG	CCATTTCAGC	AAAGGGTGAG	420
TTTGCTCAGA	AACCTTGTGG	TAATTAATCA	TTGTTACTGA	CCCTTCAGA	TTTACCCAC	480
CTTGCGCCCT	GCCACTCTCG	TCGGCTACGA	TGGCATGAGC	CCTGGTCCTA	CTTTCAATGT	540
TCCCAGAGGA	ACAGAGACTG	TAGTTAGGTT	CATCAACAAAT	GCCACCGTGG	AGAACTCGGT	600
CCATCTGCAC	GGCTCCCCAT	CGCGTGCCTT	TTTCGATGGT	TGGGCTGAAG	ATGTGACCTT	660
CCCTGGCGAG	TACAAGGATT	ACTACTTCC	CAACTACCAA	TCCGCCCGCC	TTCTGTGGTA	720
CCATGACCAC	GCTTCATGA	AGGTATGCTA	CGAGCCTTTA	TCTTCTTGG	CTACCTTGG	780
CTAACCAACT	TCCTTCGTA	GAUTGCTGAG	AATGCCTACT	TTGGTCAGGC	TGGCGCCTAC	840
ATTATCAACG	ACGAGGCTGA	GGATGCTCTC	GGTCTTCCTA	GTGGCTATGG	CGAGTTCGAT	900
ATCCCCTCTGA	TCCTGACGGC	CAAGTACTAT	AACGCCGATG	GTACCCCTGCG	TTCGACCGAG	960
GGTGAGGACC	AGGACCTGTG	GGGAGATGTC	ATCCATGTCA	ACGGACAGCC	ATGGCCTTTC	1020
CTTAACGTCC	AGCCCCGAA	GTACCGTTTC	CGATTCCCTA	ACGCTGCCGT	GTCTCGTGCT	1080
TGGCTCCTCT	ACCTCGTCAG	GACCAGCTCT	CCCAACGTCA	GAATTCCCTT	CCAAGTCATT	1140
GCCTCTGATG	CTGGTCTCCT	TCAAGCCCC	GTTCAGACCT	CTAACCTCTA	CCTTGCTGTT	1200
GCCGAGCGTT	ACGAGATCAT	TATTGGTATG	CCCTCCCTC	TCACGAATGA	GTCAAGAACT	1260
CTAAGACTAA	CACTTGTAGA	TTTCACCAAC	TTTGCTGGCC	AGACTCTTGA	CCTGCACAA	1320
GTTGCTGAGA	CCAACGATGT	CGGCGACGAG	GATGAGTACG	CTCGCACTCT	CGAGGTGATG	1380
CGCTTCGTG	TCAGCTCTGG	CACTGTTGAG	GACAACAGCC	AGGTCCCTC	CACTCTCCGT	1440
GACGTTCTT	TCCCTCCTCA	CAAGGAAGGC	CCCGCCGACA	AGCACCTCAA	TTTGAAACGC	1500
AGCAACGGAC	ACTACCTGAT	CAACGATGTT	GGCTTGGCC	ATGTCAATGA	GCGTGTCTG	1560
GCCAAGCCCG	AGCTCGGCAC	CGTTGAGGTC	TGGGAGCTCG	AGAACTCCTC	TGGAGGCTGG	1620
AGCCACCCCG	TCCACATTCA	CCTTGTGAC	TTCAAGATCC	TCAAGCGAAC	TGGTGGTCGT	1680
GGCCAGGTCA	TGCCCTACGA	GTCTGCTGGT	CTTAAGGATG	TCGTCTGGTT	GGGCAGGGGT	1740
GAGACCCTGA	CCATCGAGGC	CCACTACCAA	CCCTGGACTG	GAGCTTACAT	GTGGCACTGT	1800
CACAAACCTCA	TTCACGAGGA	TAACGACATG	ATGGCTGTAT	TCAACGTCAC	CGCCATGGAG	1860
GAGAAGGGAT	ATCTTCAGGA	GGACTTCGAG	GACCCCATGA	ACCCCAAGTG	GCGCGCCGTT	1920
CCTTACAACC	GCAACGACTT	CCATGCTCGC	GCTGGAAACT	TCTCCGCCGA	GTCCCATCACT	1980
GCCCGAGTGC	AGGAGCTGGC	CGAGCAGGAG	CCGTACAACC	GCCTCGATGA	GATCCTGGAG	2040
GATCTTGGAA	TCGAGGGAGTA	GTCTAGA				2067

FIG._5

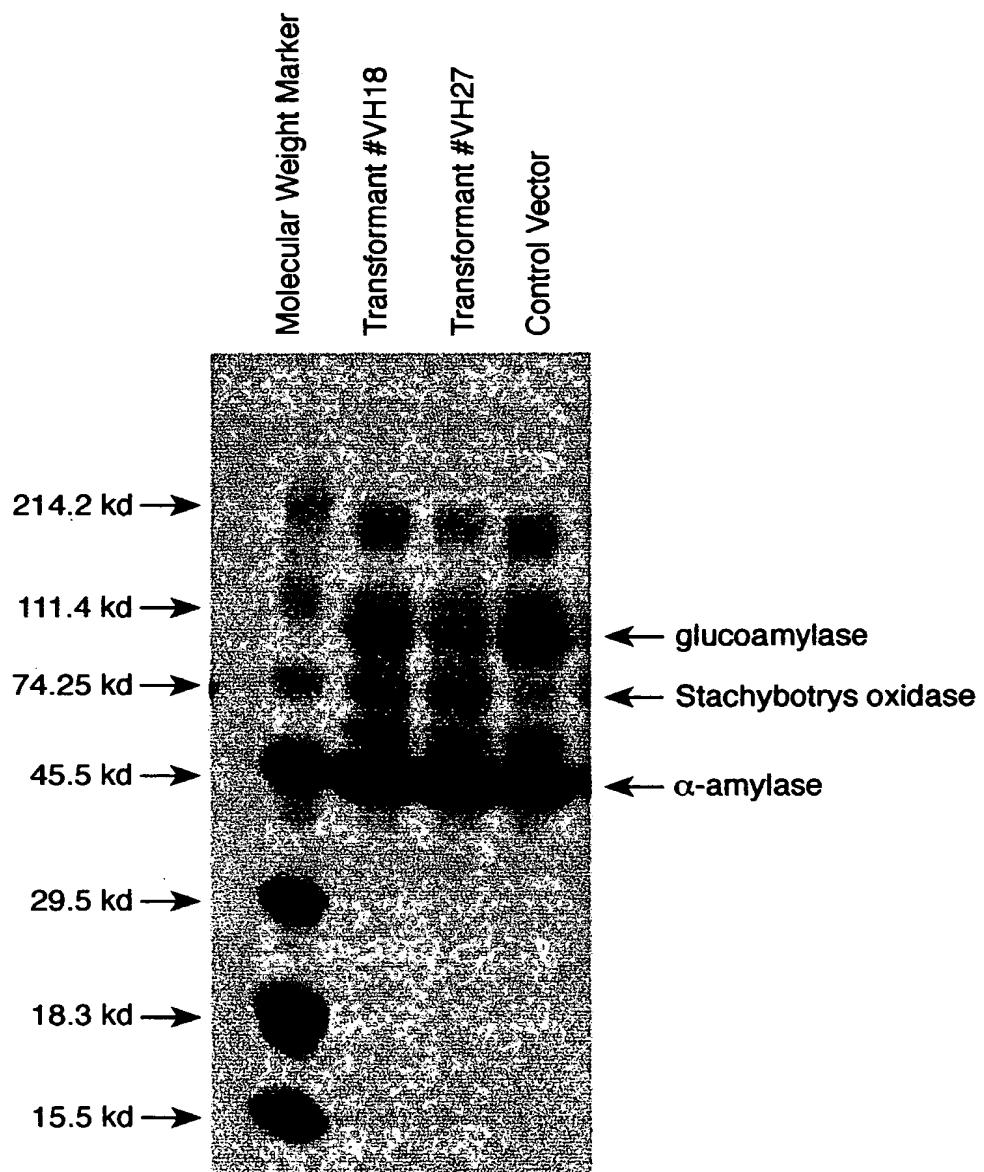


FIG._6